

ABSTRACT

It is aimed at providing an electric device such as sensor, solar cell, and the like which can be downsized without degradation of a performance and can be mounted even in a narrow place, and a method for readily producing the electric device. A semiconductor 8 is coated onto a columnar body 2 by vapor deposition, or application of a semiconductor in a melt, solution, or gel state. Four insulative wires 6 such as threads, which are mutually joined into a stripe shape, are wound onto an outside of the semiconductor. Next, one of the insulative wires 6 is peeled off, and copper is vapor deposited onto the outside through the trace, to thereby form a copper wire 9. Finally, the insulative wire, which is not neighboring to the copper wire 9, is peeled off, and aluminum is vapor deposited onto the outside through the trace, to thereby form an aluminum wire 10. It is possible to know an intensity of light irradiated to the semiconductor 8, by measuring a resistance value between the copper wire 9 and aluminum wire 10. Adjusting thicknesses in diameter of the four insulative wires enables determination of diameters of the copper wire 9 and aluminum wire 10 and intervals therebetween, to facilitate a task of designing and simulation. Further, adopting threads having small diameters as the insulative wires 6 enables obtainment of a small-sized optical sensor.